

**REMARKS**

Applicants hereby elect for further prosecution the invention of Group I, including claims 1-5. This election is, however, with traverse. Specifically, as will be discussed in greater detail below, applicants submit that the Examiner's restriction of Groups II and III is inappropriate. Thus, the applicants assert that the claims of Groups II and III are properly examined with the claims of Group I.

By way of the amendment instructions above, claims 18-30 directed to patentably distinct inventions non-elected for prosecution herein have been cancelled. However, cancellation of such claims has been effected without prejudicing the applicants' rights to file appropriate divisional applications with respect to such subject matter.

The Examiner's rationale for requiring restriction between Groups I, II and III is that the claims of Groups II and III are "...related as combination and subcombination." (Official Action at page 3, lines 3-4). The Examiner goes on to state that:

"...the combination [of Group I] does not require the particulars of the subcombination as claimed because the combinations do not claim *a derivation of the cardiac signal I [sic, in] response to optically detected movements indicative of a cardiac phase.*" (Official Action at page 3, lines 7-9, emphasis added)

Applicants are somewhat perplexed by such statement since optically detected movements indicative of a cardiac phase is precisely one significant feature which is defined in the claims in each of Groups I, II and III. In this regard, please note the following claim chart comparison of the language present in certain claims in each of the asserted patentably distinct claim Groups I, II and III:

**CLAIM CHART COMPARISON – GROUPS I, II AND III**

<b><u>Group I:</u></b>	"deriving a cardiac signal in response to said optically detected movements which is indicative of a phase in a cardiac cycle" (Claim 1, lines 5-7)
<b><u>Group II:</u></b>	"deriving a cardiac signal indicative of...cardiac activity and inactivity" (Claim 7, lines 1-3) Claim 7 of course depends from, and thereby necessarily includes all of the limitations of, claim 6 which requires the step of "optically detecting internal anatomic physical movement in response to rhythmic periods of cardiac activity and inactivity during a cardiac cycle" (Claim 6, lines 3-5)
<b><u>Group III:</u></b>	"determining movements...indicative of...cardiac activity and inactivity based on said detected reflected light [from the inserted optical fiber probe] and generating an output signal therefrom" (Claim 15, lines 9-12)

As is clearly evident from the claim chart above, although somewhat different language and hence claim scope may be present among the claims grouped in claim Groups I-III, there are nonetheless present claims ***in each of claim Groups I, II and III*** which define precisely the subject matter the Examiner erroneously asserts is not present therein. Thus, in at least each of claims 1, 7 and 15 of Groups I, II and III, respectively, language is present which unequivocally defines the derivation or generation of a signal in response to optically detected movements indicative of a cardiac phase (e.g., cardiac inactivity and activity).

With regard to new claims 31-36, it will be noted that independent claim 31 requires deriving a cardiac signal indicative of rhythmic periods of cardiac activity and inactivity by optically detecting internal anatomic physical movement in response to

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April 7, 2004

rhythmic periods of said cardiac activity and inactivity during a cardiac cycle, and generating a trigger signal in response to such derived cardiac signal which is indicative of said periods of cardiac inactivity. Thus, claims 31-36 newly presented herewith clearly link the combination and subcombination claims and as such should be examined with the elected claims of Group I.

It should now be readily apparent that claims 1-17 and 31-36 define inventions of varying scope of protection which should be examined together in the present application. Thus, although applicants do not disagree with the Examiner that patentably distinct inventions may be defined as between the various claims of Groups I, II and III, there nonetheless would be no undue burden in searching all such claim groups based on the commonality of language as noted in the claim chart above.

Therefore, it is submitted that no Patent Office economy can be achieved by way of the present restriction requirement. For these reasons, it is requested that the restriction requirement be reconsidered and withdrawn as between claim Groups I, II and III.

An early and favorable reply on the merits of claims 1-17 and 31-36 pending herein is awaited.

Respectfully submitted,

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